PARTNERING *for* ACTION

Annual Report 2006/07

Saskatchewan
Health Research
FOUNDATION

Vision

Building a healthy Saskatchewan through health research

Mission

The Saskatchewan Health Research Foundation contributes to a healthy province by funding and promoting excellence in health research, promoting the benefits of health research, and enhancing capacity, including securing funds to support excellent research and researchers.

Values

We believe health research ...

- is the ethical search for truth, knowledge, and understanding about human health;
- is an investment that leads to benefits for all Saskatchewan residents in many areas, including health, education and the economy;
- includes both basic and applied research; and
- encompasses many dimensions, including biomedical science, clinical investigation, health services and systems research, and research into the determinants of population health.

We are committed to good governance, including ...

- good stewardship for the resources entrusted to us; and
- the highest standards of public accountability.

We will maintain the highest standards of professional conduct, including ...

- integrity and honesty;
- respect for diverse perspectives and approaches; and
- clear, open, honest and timely communication. .

We will work co-operatively and collaboratively with others to ...

- achieve mutual goals related to advancing health research in Saskatchewan; and
- ensure research findings are shared and used as widely as possible.

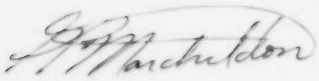
We strive for excellence and innovation in all our endeavours.

The Honourable Len Taylor
Minister of Health
Legislative Assembly
Regina SK S4S 0B3

Dear Mr. Taylor:

I am pleased to submit, for your consideration, the annual report of the Saskatchewan Health Research Foundation for the fiscal period April 1, 2006 to March 31, 2007.

Respectfully submitted,



Gregory P. Marchildon, PhD

Board Chair

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Cover Photo: Deb Marshall Photography

Board Chair's Message

This was my first full year as Chair of the Foundation's Board and I'd like to take this opportunity to thank my Board colleagues and the staff of the Foundation for their support as I learned about the Foundation and gained some experience in my new role. It has truly been a privilege to work with this dedicated and talented group.

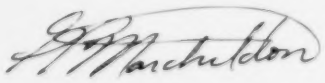
During 2006/07, we increased our emphasis on seeking and receiving funds for advancing health research in the province – a key part of our mandate defined in *The Saskatchewan Health Research Foundation Act*. After seeking expert advice earlier about strategies for fulfilling this role, the Board approved a fund development model in 2005 that was based on a partnership approach. Over the past year, we invested considerable resources in identifying and connecting with potential partners and found there was strong interest among charitable agencies, other foundations, health regions, and universities in co-funding research initiatives with us.

Our preferred mechanism is a partnered Saskatchewan Research Chairs program. These awards, with funding shared on a 50:50 basis between SHRF and select partners, would support a nucleus of activity including salary support for the chair holder plus support for training positions and research activities. We would target areas that align with our partners' priorities and those defined in Saskatchewan's *Health Research Strategy* (see *Strategy* section). To launch this initiative, we need additional resources and therefore approached the provincial government for a budget increase in 2007-08 to launch the new program. Although we received less than requested, we are going to begin moving ahead with a limited version of the program to demonstrate the potential of a full, cost-shared Chairs program in the future.

The *Partnerships* section of this report outlines some of our ongoing successes. Notably, we have been providing support for the Regional Partnership Program offered by the Canadian Institutes of Health Research (CIHR), a program that brings in an additional $1-million in federal health research funding to the province each year. Our partnerships with the University of Saskatchewan and the University of Regina to support increased health research co-ordination have also contributed to success in growing the health research enterprise and attracting national funding. At the University of Saskatchewan, the partnership is evolving to support a new position, Associate Vice-President Research (Health), which will be shared with the Saskatoon Health Region (SHR), where the title will be Vice-President Research and Innovation. Congratulations to Beth Horsburgh on her successful appointment to this position, starting July 1, 2007, and thanks to Bruce Waygood for his valuable work as University Co-ordinator of Health Research over the past eight years.

In the coming year, we will be managing funds from Saskatchewan Advanced Education and Employment for matching national grants in CIHR's Partnership for Health System Improvement Program. This program operates out of the CIHR Institute for Health Services and Policy Research and requires a health system-university research partnership. There has been little activity from Saskatchewan in this program. We plan to promote the opportunity and encourage Saskatchewan researchers to take advantage of these national funds to tackle applied research issues of benefit to our health system. This aligns very well with our goal of working more closely with the regional health authorities to support research in their institutions.

I look forward to the challenges and opportunities that lie ahead and I am optimistic that our Board and staff will continue to make good progress on fulfilling our mandate and implementing the *Health Research Strategy*. To previous members who left the Board this year – John Biss, one of our inaugural members, and Allan Cahoon – thank you for your dedication and service. To our newest member, Reg Urbanowski, welcome! I look forward to working with all of my fellow Board members, our strong staff, and our partners in advancing our vision of a well-supported, vibrant health research enterprise in Saskatchewan that addresses important health issues and builds on our province's many strengths.



Gregory P. Marchildon, PhD

Board Chair

Board of Directors

Greg Marchildon *Chair (4)*
University of Regina

Murray Knuttila *Vice-Chair (4)*
Regina Qu'Appelle Health Region

Allan Cahoon *(2)*
University of Regina
(until February 14, 2007)

Neena Chappell
University of Victoria (3)

Louis Delbaere
University of Saskatchewan (4)

Gary Glavin
University of Manitoba (2)

John Gordon
University of Saskatchewan (4)

Cory Neudorf
Saskatoon Health Region (3)

Pauline Rousseau
Saskatchewan Health (3)

Reg Urbanowski *(1)*
Saskatchewan Advanced Education & Employment
(appointed December 11, 2006)

Debbie Wilkie
Saskatchewan Industry & Resources (2)

Tom Wishart
University of Saskatchewan (4)

* Figures in brackets indicate the number of meetings each SHRF board member attended in the 2006/07 fiscal year.

Mandate

As defined in ***The Saskatchewan Health Research Foundation Act*** *(2002)*

1) Seek and receive funding from government and non-government sources for the advancement of research.

2) Encourage and facilitate research in health sciences, the health-related social sciences and other health-related fields of study.

3) Assist the Minister of Health to develop a provincial strategy for research into matters associated with the health sciences, the health-related social sciences and other health-related fields of study.

4) Provide funding to persons and agencies who are conducting or proposing to conduct research projects that are consistent with the provincial strategy.

5) Disseminate information to members of health-related professions and to the public respecting the objects of the Foundation, the research that the Foundation supports, the results of that research and conclusions drawn from that research.

CEO's Message

There are many things that I'm proud of as I look back over the Foundation's accomplishments in 2006/07. Many of these relied heavily on input from, and consultation with, our partners. They also depended on the talent and energy of our small, dedicated staff and the wise guidance and commitment of our Board members. I'd like to focus here on several major initiatives that succeeded because of our work with partners.

We started in the spring with two separate rounds of focus groups. One set focused on how to build capacity in the province for knowledge translation – i.e., for sharing and using research to improve health and health care and to generate other social benefits. The result, produced with guidance from a multi-party advisory committee, was a provincial "Health Research in Action" framework. This is a very practical template that most agencies can apply, in whole or in part, to develop personnel with the skills and time for knowledge translation and provide the necessary tools and supporting structures for strengthening connections between research and practice. The results, over time, should be improved policies, services, products, and health outcomes.

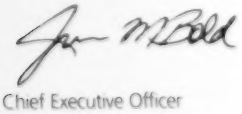
Our other set of focus groups explored priorities for rural and remote health services research, a field in which Saskatchewan has both strengths and needs. Focus group participants observed that Saskatchewan researchers should be world leaders in the field and, indeed, we already have researchers of that calibre. Priorities suggested for this area of research, and confirmed at a small think-tank session, included: the impact of geography on access to services; models to improve access to primary health care; the role of technology in service delivery; rural-urban differences in health determinants; and the impact of jurisdictional issues on the health of our First Nations population. Three important principles also emerged: involving the community; sharing and using research knowledge for improvement; and nurturing an interdisciplinary approach.

This year was a milestone for our work in evaluating the impact of health research. With a staff position dedicated to this endeavour, we were able to develop a framework for tracking the progress and impact of the *Health Research Strategy*. Our approach involves a "suite" of measures to assess impact in several categories: knowledge production; benefits to future research and research use; political and administrative benefits; health sector benefits; and broader economic benefits. This work builds on the well-accepted Buxton-Hanney "Payback Model" being adopted by funding agencies in Canada. We are working with our counterparts in other provinces to develop a set of common impact measures. We have also moved quickly on certain components to collect baseline data for assessing future impact. These include: a public opinion survey about the value of health research; a study of the social and economic impact of health research; tracking health research activity and funding; and a study of publication patterns that assesses scientific positioning in health research.

All of these initiatives flow from our work to implement the provincial *Health Research Strategy* and depend heavily on collaboration and commitment from many agencies and individuals. Over the coming months, we will be sharing and discussing the results of these consultations and exploring ways that the Foundation can support and advance work in these areas. Possibilities include partnering to support knowledge networks and research chairs in priority areas, sponsoring consensus conferences or summits on key issues, offering more support for applied health services research, and encouraging connections between researchers and their relevant communities of practice.

In 2007/08, we will increase the focus on our fund development mandate, using a model of partnering to generate resources for advancing the themes and priorities of the provincial *Health Research Strategy*. We are grateful for the ongoing investment of the provincial government in health research and for the three-percent increase in our base budget for the coming year. Our goal is to work with provincial and national partners to maximize those resources and strengthen our ability to contribute to a healthy Saskatchewan through health research. Our current theme of "Partnering for Action" will be guiding our work for many months and years to come.

June M. Bold, MSc



Chief Executive Officer

Staff

June Bold
Chief Executive Officer

Alexa Briggs
Funding Programs Manager

Jason Disano
Research Analyst

Lynn Nastiuk
Administrative Assistant

Sherry Wailing
Accountant

James Winkel
Communications Officer

Val Ziegler
Administrative Secretary

Saskatchewan's *Health Research Strategy*

The provincial *Health Research Strategy*, released by the Minister of Health in 2004, is an exciting vision for strengthening health research in Saskatchewan and ensuring that research leads to benefits for its citizens. Figure 1 indicates the Strategy's four major themes and describes the five health research priority areas, that emerged from province-wide consultations in 2003-04. The priority areas reflect the province's demographic and geographic characteristics, the health status and health challenges of Saskatchewan residents, and existing areas of strength and comparative advantage. Below, we highlight the Foundation's work with our partners to implement the Strategy during the early years of this ten-year plan.

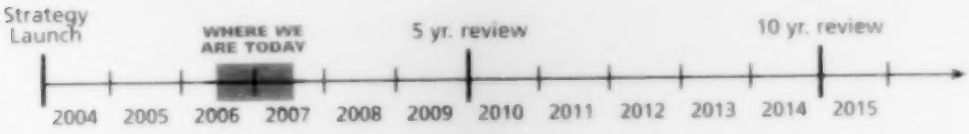


Figure 1: Saskatchewan's Health Research Strategy

The key messages from consultations are:

- Saskatchewan needs to focus its research resources and energies in areas critical to the health and well-being of its population.
- Saskatchewan also needs to build on its current health research strengths and its comparative advantages.

The major themes of the Strategy are:

1. Advancing health research priority areas (see below);
2. Applying what we learn (knowledge translation);
3. Building health research capacity; and
4. Tracking progress and impact.

The five health research priority areas of the Strategy are:

a. Health needs of specific populations, with emphasis on Aboriginal people and seniors;
b. Health systems and policy research, with emphasis on: health human resources; quality improvement; primary health care; mental health and addictions; innovative delivery models; and rural and remote health service delivery;
c. Determinants of health status, including early childhood development and the prevention and underlying causes of chronic and lifestyle-related disease (particularly diabetes, obesity and smoking);
d. Public health, including infectious diseases, water safety and food safety; and
e. Synchrotron-based health research.

The full *Health Research Strategy* is available on our Web site.

In our role as the lead agency for implementing the Strategy, our early activities included:

- hosting a Health Research Summit in December 2004 to share the plan with a wide range of stakeholders and seek implementation advice;
- aligning our funding programs with the priority areas and themes over the past two years;
- developing a model and measures for evaluating the Strategy's progress and impact;
- collecting baseline evaluation data (see *Measuring Impact* section of this report);
- consulting on rural and remote health research priorities, leading to a report that will be finalized early in the new fiscal year;
- working with partners to consult broadly and develop a framework, called "Health Research in Action," to guide agencies in building Saskatchewan's capacity for sharing and using health research to create health and social benefits; and
- producing "Check Up 2006," a report card of our progress on the Strategy's implementation.

The following four Strategy-related documents, produced during 2006/07, are available on our Web site or from our office:

- Rural and Remote Health Services in Saskatchewan: Identifying Research Priorities (June 2007)
- Health Research in Action: Toward a Provincial Capacity-Building Framework (May 2007)
- Evaluating Saskatchewan's *Health Research Strategy*: An Evaluation Framework (January 2007)
- Check Up 2006: *Health Research Strategy* Progress 2004-2006 (November 2006)

Partnering for Action: Progress and Plans

Strategic Themes	Looking Back at 2006-07 ... Action Highlights	Looking Ahead to 2007-08 ... Planned Actions
1 Advancing Saskatchewan's health research priority areas	Allocated over 80% of competitive funding resources to support health research priority areas Produced a discussion paper and completed consultations on directions for rural and remote health services research in Saskatchewan Offered a new Health Research Team Grant Program to encourage and support collaborative research in priority areas	Continue to align our funding programs with the Strategy's health research priorities Complete and share broadly the report on directions for rural and remote health research Establish a small number of competitive, partnered Health Research Chairs in priority areas, resources permitting
2 Fostering the exchange and application of new health research knowledge	Completed project to develop the *Health Research in Action* framework for increasing knowledge translation capacity in Saskatchewan Continued partnership with the SUN Council to support health professionals in applied research training Required researchers to address knowledge translation in their funding applications Supported research-based conferences and workshops focusing on exchanging knowledge	Share the *Health Research in Action* framework with health regions and researchers in Saskatchewan, and with others as requested Consult with provincial partners and external agencies about ways to support sharing and using health research Continue emphasis on knowledge translation in all funding programs Continue Research Connections Program, connecting researchers with other researchers, students, and relevant communities of practice
3 Strengthening Saskatchewan's health research capacity	Supported the Sask-CIHR Regional Partnership Program (RPP), aligned with the Strategy Continued partnerships with the Universities of Saskatchewan and Regina on two special health research co-ordination positions Provided funding support for new faculty fellowships, groups (new and renewal), and teams Led Health Research Week and other activities showcasing health research (e.g., awards dinner, achievement awards, special advertising)	Continue support for the Sask-CIHR RPP to increase federally funded research activity in Saskatchewan* Continue support for special health research co-ordination positions at the Universities of Saskatchewan and Regina With partners, establish research chairs to attract more top-quality researchers in priority areas Expand Health Research Week and other activities that showcase health research
4 Implementing the Health Research Strategy and tracking progress	Developed an evaluation framework for the Strategy Contracted and undertook studies to collect baseline data on: public opinion, social/economic impact, publication output, federal funding trends Monitored outputs and outcomes of grants, using final reports and a five-year follow-up survey Submitted a request to government for additional resources to implement the Strategy	Implement the evaluation plan and select common impact indicators with national partners Share and discuss baseline data and impact information with stakeholders Continue to monitor grant outputs/outomces and begin formal evaluation of our programs, doing one program a year Pursue resources and partnerships to advance our mandate and the Strategy's themes

Funding Programs

Our funding programs are important tools for helping us fulfill various aspects of our mandate. Our programs have a strong developmental focus, aiming to build health research capacity and assisting Saskatchewan researchers in entering the highly competitive national scene. We continue to encourage and support a broad range of human health research including: basic biomedical science; clinical research; health services and system research; and research into the cultural, social and environmental determinants of population health.

Our programs continue to align funding decisions with the strategic priority areas outlined in the provincial *Health Research Strategy*. In our long-standing New Investigator Establishment Grants and Research Fellowship programs, funding preference was given to proposals in the priority research areas; 50% of the funds for each of these programs were earmarked for priority area research. Actual funds allocated to priority areas in both programs exceeded that level. The Strategic Priorities Grants and the Strategic Rapid Response Grants focused on advancing priority area research exclusively.

In total, our Board approved over $3-million in research grants and fellowships in 2006-07. This section:

- provides an overview of all grants and awards approved (see Table 1);
- describes funding programs offered in this fiscal year; and
- lists recipients for each of the programs.

Further information about our programs, policies, eligibility criteria and submission requirements for all programs is available in our *SHRF Awards Guide*, published annually and posted on our Web site. The Web site also carries competition results and details about each grant, including funding amounts and easy-reading project summaries.

Table 1: *Applications Received, Recommended and Approved 2006-07*

Grant Category	Received		Recommended		Approved*		
	No.	$	No.	$	No.	Term	$
Research Fellowships							
Postdoctoral	20	1,800,000	16	1,710,000	7	2 yrs	630,000
Clinical	0	—		—	0	—	—
Subtotal		1,800,000		1,710,000			630,000
New Investigator Establishment							
Biomedical	13	1,031,459	10	795,423	6	2 yrs	477,758
Accompanying Equipment (Biomedical)	8	229,419	7	199,419	4	6 mos	113,675
Subtotal		1,260,878		994,842			591,433
Socio-health	14	1,054,914	10	742,208	6	2 yrs	465,775
Accompanying Equipment (Socio-health)	4	105,278	3	89,415	2	6 mos	59,992
Subtotal		1,160,192		831,623			525,767
Partnership	1	20,000	1	20,000	1	2 yrs	20,000
Research Connections			9	56,000	9	n/a	56,000
Strategic Priorities	4	39,636	3	29,654	3	1 yr	29,654
Research Group Development	4	200,000	3	150,000	3	2 yrs	150,000
Health Research Team							
Letters of Intent	6	n/a	4	n/a	4	n/a	n/a
Full Application	4	2,000,000	3	1,790,000	3	2-3 yrs	1,790,000
Total		6,480,706		5,582,119			3,792,854

* *Approved amounts are for the full term of the grant.*

New Investigator Establishment Grants

Asterisk (*) indicates accompanying Equipment Grant

Biomedical

Xiongbiao (Daniel) Chen*
Mechanical Engineering, Engineering, University of Saskatchewan
Bio-mechanical design and fabrication of 3-dimensional tissue engineering scaffolds

Jiang-Hong Gong
Vaccine and Infectious Disease Organization
University of Saskatchewan
Immunomodulatory chemokine MIG: Mechanism and neonatal adjuvant activity

Debbie Kelly*
Psychology, Arts and Science, University of Saskatchewan
Influence of aging and environmental enrichment of spatial abilities

Emina Torlakovic*
Pathology, Medicine, University of Saskatchewan
The role of PU.1, a B cell transcription factor, in defining germinal center phenotype of malignant B cell lymphoma

Lynn Weber*
Veterinary Biomedical Sciences, Veterinary Medicine, University of Saskatchewan
Role of Polycyclic Aromatic Hydrocarbons (PAHs) in tobacco smoke-induced vascular function

Heather Wilson
Vaccine and Infectious Disease Organization, University of Saskatchewan
Elucidating the mechanism of CpG ODN-induced B cell activation

Socio-health

Vanina Dal Bello-Haas*
Physical Therapy, Medicine, University of Saskatchewan
Factors associated with falls and near-falls in community dwelling older adults with early stage dementia

Jonathan Farthing*
Kinesiology, University of Saskatchewan
The application of cross-education of strength to attenuate neuromuscular weakness acquired during unilateral limb immobilization

Ronald Martin
Educational Psychology, Education, University of Regina
Burnout and work engagement as mediators in the relationships of job characteristics with health problems and early retirement plans

Louise Racine
Nursing, University of Saskatchewan
Exploring perceptions of health care: A step toward defining culturally sensitive care for non-western immigrants and refugees in Saskatchewan

New Investigator Establishment Grants

These grants assist university faculty who are new or newly resident in Saskatchewan establish independent health research programs within the province. The grants also help recipients achieve the research productivity necessary for obtaining longer term and more substantial funding from national and other external agencies.

Up to $40,000/year for 2 years

RESEARCH SPOTLIGHT

Designing a Mentoring Program for Primary Health Care Practitioners

Roanne Thomas-MacLean

College of Arts and Science, University of Saskatchewan

It is anticipated that current family physician shortages in Saskatchewan are predicted to worsen over the next few years. These shortages are largely due to retirements, relocations and issues associated with job satisfaction. As a result, the question many people are asking is how do we address this shortage? One possible solution may be to develop a mentoring program for primary health care practitioners.

Roanne Thomas-MacLean, with the help of a New Investigator Establishment Grant from SHRF, will attempt to develop such a program over the next two years.

"It is anticipated that a funding proposal will be developed to pilot a mentorship model in Saskatchewan and at least one other region in Canada with the aim of enhancing applicability in other jurisdictions," Thomas-MacLean said.

The overall goal of the research project is to retain locally trained physicians who establish their practices in this province.

New Investigator Equipment Grants

Applicants for New Investigator Establishment Grants may also apply for an accompanying grant to acquire major equipment essential to their research that is not available through other means.

Up to $30,000 for up to 6 months

RESEARCH SPOTLIGHT

Taking a Closer Look at Environmental Contaminants in Tobacco

Lynn Weber

Western College of Veterinary Medicine, University of Saskatchewan

Heart (cardiovascular) disease is the leading cause of death in the developed world, and smoking is the primary, preventable habit that often leads to it. Despite numerous anti-smoking campaigns and no-smoking legislation throughout Canada, first and second hand exposure to tobacco smoke continues to take its toll. Dr. Lynn Weber, with the help of a New Investigator Establishment Grant and accompanying Equipment grant from SHRF, will use a smoking machine to determine whether polycyclic aromatic hydrocarbons (PAH) are responsible for the association between tobacco smoke and heart disease.

"This research is important. If we find that PAHs are responsible for the increasing prevalence of heart disease then we can take steps to specifically remove or reduce such compounds," said Weber.

Weber and her colleagues at the Western College of Veterinary Medicine at the University of Saskatchewan will compare the effects of tobacco smoke versus benzo[a]pyrene (BaP), a major PAH component of tobacco smoke, in both rats and swine to determine what animal best represents a human. Once that is determined, the research project may someday provide the basis for a model where researchers can pinpoint the role of PAHs in tobacco smoke in an effort to reduce the prevalence of cardiovascular disease.

Postdoctoral Research Fellowships

This program offers a full-time training opportunity for high-quality candidates in a health-related field. Fellows are supervised by an experienced, active researcher to further develop their research skills and equip themselves for a career in health research.

Salary stipend, $40,000/year and research allowance, $5,000/year for up to 2 years

RESEARCH SPOTLIGHT

What Role Does Wheat Play in the Prevention of Colon Cancer?

Brij Verma *(R)* **and Supervisors Ravi Chibbar** *(L)* **and Suzanne Laferte**
(missing from photo)

College of Agriculture, University of Saskatchewan

Wheat is one of the most common and important food grains in the world. Research has shown that wheat bran more consistently inhibits colon cancer compared to oat or corn bran, but just how wheat bran does this is unknown. With the help of an SHRF Postdoctoral Fellowship grant, Brij Verma and his supervisors will try to define the components that are responsible for colon cancer prevention in wheat.

The researchers will attempt to shed light on this topic by extracting compounds from numerous strains of wheat and define their chemistry; the extracts will then be tested against colon cancer cells grown in the laboratory. The extracts will finally be incorporated into the diets of mice afflicted with colon cancer. By measuring the effectiveness of these compounds on the mice, Verma and his supervisors can determine what compounds, and what wheat varieties, are most effective in colon cancer prevention.

Verma believes the research will have long-term health and economic benefits:

"This research will be used by wheat breeders to develop wheat varieties with elevated concentrations of cancer prevention activities in the grain. Saskatchewan producers will benefit by producing specialty wheat that will garner a better market price."

RESEARCH SPOTLIGHT

Do Diet Changes and Regular Physical Activity Benefit Bone Health in Postmenopausal Women?

Hassanali Vatanparast *(L)* **and Supervisor Phil Chilibeck** *(R)*

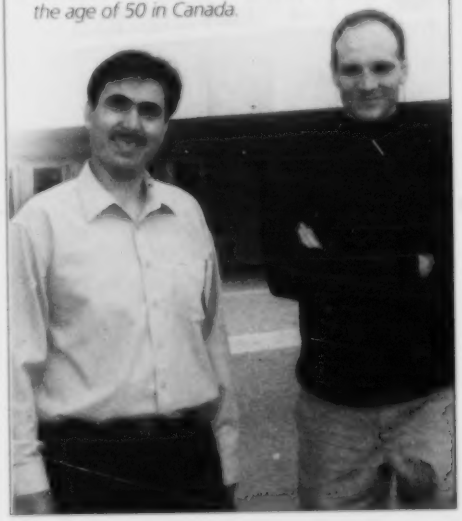
College of Kinesiology, University of Saskatchewan

Although the gradual loss of bone tissue is a normal consequence of aging, postmenopausal women are prone to additional bone loss primarily due to the decline of estrogen in their bodies. This factor alone places one out of every four women over the age of 50 at risk of osteoporosis. Because the number of postmenopausal women in Canada continues to grow, the burden of health care costs attributed to osteoporosis climbs.

In an effort to curb the onset of osteoporosis, Hassanali Vatanparast and his supervisor, Phil Chilibeck, are researching whether or not diet changes and regular physical activity can strengthen the bones of postmenopausal women.

"An increasing sedentary lifestyle and lack of proper nutrition may be contributing factors to the increased incidence of osteoporosis. Hence, the optimal intervention for maintaining bone mass in postmenopausal women may be a combination of physical activity and dietary intervention," said Vatanaparast.

During the course of his SHRF-funded research, Vatanparast will determine whether a combination of isoflavone (derived from soybeans) supplements and exercise training improve postmenopausal bone health. By comparing groups of women who regularly exercise and consume soy isoflavone through a high fiber diet to those who don't, Vatanparast hopes to show how these factors can lower the incidence of osteoporosis among women over the age of 50 in Canada.



Roanne Thomas-MacLean
Sociology, Arts and Science, University of Saskatchewan
Primary health care: Mentoring in Saskatchewan

Philip Woods
Nursing, University of Saskatchewan
A review of clinical risk assessment and management approaches in Saskatchewan adult inpatient psychiatric units, forensic units, and correctional institutions

Postdoctoral Research Fellowships

(supervisor's name in parentheses)

Biomedical

Ildiko Badea (S.K. Tikoo)
Vaccine and Infectious Disease Organization, University of Saskatchewan
Dendritic cell targeted adenovirus vaccin vector

Azharul Islam (T. Harkness)
Anatomy and Cell Biology, Medicine, University of Saskatchewan
Defects in the establishment of physiologically relevant chromatin as an underlying determinant of disease

Shaunivan Labiuk (S. van den Hurk)
Vaccine and Infectious Disease Organization, University of Saskatchewan
Structural studies of herpes virus tegument proteins

Vijitha Senanayake (B. Juurlink)
Anatomy and Cell Biology, Medicine, University of Saskatchewan
Cellular redox state and the epigenome

Brij Verma (R. Chibbar and S. Lafert
Plant Sciences, Agriculture, University of Saskatchewan
Characterization of wheat bran cancer-prevention activity(ies)

Zhenmin Ye (J. Xiang)
Oncology, Medicine, University of Saskatchewan
A novel genetic immunotherapy by combining double IL-18/IP-10 gene therapy using novel gutted adenovirus vector and dendritic cell vaccine in combating well-established tumors

Socio-health

Hassanali Vatanparast (P. Chilibeck)
Kinesiology, University of Saskatchewa
The effect of soy isoflavones and exer training on markers of bone turnover postmenopausal women

Partnership Grant

Louise Racine
Nursing, University of Saskatchewan
Exploring perceptions of health care: A step toward defining culturally sensitive care for non-western immigrants and refugees in Saskatchewan (Also supported by the Nursing Care Partnership, Canadian Nurses Foundation)

Research Connections Grants

Finding a Balance: Pathways to Health
Continuing Nursing Education, Nursing, University of Saskatchewan
Key contact: *Kyla Avis*

Health Informatics: Practical Applications, Future Possibilities
Continuing Nursing Education, Nursing, University of Saskatchewan
Key contact: *Kyla Avis*

Putting Theory into Practice: Transferring Creativity into Community Wisdom" (2nd Annual Graduate Students' Research Conference, University of Regina)
Graduate Studies and Research, University of Regina
Key contact: *Dongyan Blatchford*

Synchrotron Protein Crystallography Workshop
Canadian Light Source, University of Saskatchewan
Key contact: *Pawel Grochulski*

Partnership Grants

This funding envelope allows SHRF to collaborate with other funding agencies to support health research in Saskatchewan and increase national funds coming to Saskatchewan. In 2006-07 we again collaborated with the Nursing Care Partnership, a research initiative managed by the Canadian Nurses Foundation and funded by the Canadian Health Services Research Foundation. Through this partnership we were able to provide strategic funding for capacity-building activities as well as fund additional research in the province.

There are also partnership opportunities through our Strategic Rapid Response Program, which is intended to support emergent and significant opportunities to strengthen and develop the priority areas in the *Health Research Strategy*. It provides a mechanism to respond rapidly to national opportunities requiring provincial partnering or matching funds.

RESEARCH SPOTLIGHT

Exploring Perceptions of Health Care

Louise Racine RN PhD

College of Nursing, University of Saskatchewan

One challenge confronting health care professionals in Saskatchewan is the provision of health care to immigrants and refugees from non-Western or non-European countries. Serious health issues have arisen among some newcomers of these populations. This is why studying the readiness of a health care system attempting to address these issues deserves further exploration.

In conjunction with the Canadian Nurses Foundation, SHRF has provided Louise Racine with research money through a Partnership grant to look deeper into this issue. According to Racine, the broad provision of these services does not always mean one size fits all. What's required is a more refined approach to delivering health care services to specific individuals:

"Culturally sensitive health care will decrease social inequities in accessing health care services."

Racine's research will explore perceptions of health and illness among men and women from Afghanistan, Sudan, Iraq, Sri Lanka and Colombia. She will look at their perceptions of health, illness and access to health services, document how immigrants use health services, and identify specific health needs. Racine anticipates that her research findings will illustrate how race, ethnicity and gender intersect in shaping immigrants' perceptions of health.

Racine also anticipates that her research will also integrate immigrant perspectives into the design and delivery of culturally sensitive health services.

Clinical Research Fellowships

This program is intended to help remedy the serious shortage of clinician-scientists in Saskatchewan. It offers a research training opportunity for high-quality candidates to develop a research skill set that will allow them to undertake a career as a clinician scientist in Saskatchewan.

Salary stipend, $40,000 to $50,000/year and research allowance, $5,000/year for up to 2 years

Research Connections Grants

This program provides matching funds for the support of health research conferences, workshops, research days and similar events that are organized and held in Saskatchewan. It is intended to: promote the advancement and exchange of new health research knowledge; encourage linkages among multiple stakeholders; help address health-related knowledge gaps in areas of particular importance to the province; and nurture the development of the next generation of health researchers.

Up to $10,000 matching funds per event

RESEARCH SPOTLIGHT

Elders Forum 2006

Carol Romanow and Ernest Sauve
Prince Albert Grand Council

Some health researchers are faced with the formidable task of trying to learn and apply appropriate protocols to conduct health research within specific population groups. Research methods that may work within some populations may not work with others. In an effort to share knowledge surrounding health research within First Nations communities in Saskatchewan and Canada, the Prince Albert Grand Council (PAGC) applied to SHRF's Research Connections Program to help sponsor a three-day conference to share research methods with respect to First Nations communities.

The conference – Wisdom of Our Elders Gathering – was held at the Sturgeon Lake First Nation (northwest of Prince Albert) September 21–23, 2006. Attending and speaking at the conference were elders from all 12 first nations within PAGC's jurisdiction, as well as First Nations health researchers from Saskatchewan and Ontario.

Conference participants and health researchers heard many stories from elders who provided their wisdom and guidance. This valuable insight and information will be used to develop research principles and protocols that are meaningful, ethical and culturally appropriate for PAGC and its member communities.

Research Group Development Grants

This program is an extension of our former Research Group Facilitation Grant program. Its purpose is to support the formation and early development of health research groups that have the potential to evolve into highly productive and sustainable research teams capable of securing ongoing competitive funding.

Up to $25,000/year matching funds for up to 2 years, renewable once

RESEARCH SPOTLIGHT

Primary Health Care Research Group (PHC-RG)

Vivian Ramsden and Gill White *(Co-leaders)*
Colleges of Medicine and Nursing
University of Saskatchewan

The Primary Health Care Research Group is made up of a number of individuals from various professions who have joined forces to enhance Saskatchewan's health care system. Primary health care, according to the World Health Organization (WHO), is: essential health care; based on practical, scientifically sound, and socially acceptable methods and technology; universally accessible to all in the community, through their full participation. Keeping the concept of community involvement in mind, the PHC-RG intends to use SHRF's Research Group Development Grant over the next two years to find ways for communities to shift their emphasis from the traditional sick-cure medical system of care to a model of primary health care that that reflects preventative practices. Vivian Ramsden, one of the group's co-leaders, believes that this participatory approach brings out amazing results:

"Community-based participatory research methods bring the best and the latest technology for design and measurement to the strengths, challenges and opportunities for change with the community."

The group selects sites across the province to specifically research methods communities can use to enhance education and practice, initiate participatory methods and processes, and ensure evaluation strategies are integrated into educational and clinical practices.

14th Annual Life and Health Sciences Research Conference
Medicine, University of Saskatchewan
Key contact: *Curtis Larson*

***In motion* National Community Physical Activity Summer Institute**
Kinesiology,
University of Saskatchewan
Key contacts: *Don Ratcliffe-Smith and Karen Chad*

Elders Forum, in concert with Health Research Conference
Health and Social Development,
Prince Albert Grand Council
Key contacts: *Carol Romanow and Ernest Sauve*

Mingling Minds Molecules and Machines: Participating Effectively in Collaborative Research
Pediatrics, Medicine,
University of Saskatchewan
Key contact: *Alan Rosenberg*

2006 International Centre for Infectious Diseases Research and Innovation Retreat
International Centre for Infectious Diseases
Key contact: *Tamara Thompson*

Research Group Development Grants

Neural Systems and Plasticity Group
Anatomy and Cell Biology, Medicine,
University of Saskatchewan
Group leader: *Michael Corcoran*

Reproductive Science and Medicine Group
Obstetrics, Gynecology and Reproductive Sciences, Medicine,
University of Saskatchewan
Group leader: *Roger Pierson*

Primary Health Care
Family Medicine, Medicine,
University of Saskatchewan
Group leaders: *Vivian Ramsden and Gill White*

Strategic Priorities Grants

Adam Baxter-Jones
Kinesiology, University of Saskatchewan
What prevents adolescent girls from being physically active? The effects and interaction of growth and maturation

Magdalena Cismaru
Business Administration,
University of Regina
Using protection motivation theory to improve public health communications

Wendee Kubik
Women's Studies, Arts,
University of Regina
Grandmothers caring for grandchildren support network

Health Research Team Grants

Molecular Design Research Team
Biochemistry, Medicine,
University of Saskatchewan
Team leader: Louis Delbaere

Saskatchewan Population Health and Evaluation Research Unit
Social Work, University of Regina
Community Health and Epidemiology, Medicine, University of Saskatchewan
Team leaders: Bonnie Jeffery and Nazeem Muhajarine

Intrauterine Inflammation Research Team
Pediatrics, Medicine,
University of Saskatchewan
Team leader: Alan Rosenberg

Strategic Priorities Grants

This program is intended to improve success rates in major national competitions for Saskatchewan-based researchers addressing priority areas of the *Health Research Strategy*. The grants provide support for proposal development and, if successful nationally, for graduate student involvement in the resulting national project. The 2006-07 competition year was the last year for this program, given limited activity and wider availability of proposal development funds.

Up to $10,000 for up to 1 year for proposal development

Up to an additional $20,000/year for 2 years for graduate students

RESEARCH SPOTLIGHT

Developing More Effective Health Communication Messages

Magdalena Cismaru

Faculty of Business Administration, University of Regina

It is estimated that approximately $12 million dollars is spent every year in Canada on public service campaigns telling us how to change our health habits. However, the question remains: why do some people change health habits while others do not? Magdalena Cismaru from the University of Regina's Faculty of Business Administration believes part of the reason is a person's thought process.

"Although the factors influencing the effectiveness of a health communication are relatively known, little is known about people's thoughts and feelings when considering whether or not to follow a particular, recommended health behaviour and the underlying decision making process that follows. Without a good understanding of this process, communication messages are likely to be unsuccessful."

In an attempt to study this issue further Cismaru received a Strategic Priorities Grant from the Foundation in 2006. Strategic Priorities Grants are intended to improve success rates in major national competitions for proposals that fall within the priority areas of Saskatchewan's Health Research Strategy. With this grant, Cismaru and her colleagues will further develop their approach to exploring health communications, as an important step to securing longer-term funding.

Health Research Team Grants

This program provides major support for teams of talented and experienced researchers doing high-quality health research, contributing to knowledge translation, and building research capacity at a level of productivity that would not be possible from individual researchers working on their own.

Our funding for ongoing research centres is being converted to competitive funding via this new Health Research Team Grant Program. Our commitments to the five remaining centres are winding down, starting this year, and continuing over the next two years. Initiatives previously supported with centres funding are eligible to apply in the new program.

Up to $500,000/year matching funds for up to 5 years, renewable once

RESEARCH SPOTLIGHT

Is There a Link Between Intrauterine Inflammation and Chronic Disease?

Inflammatory Diseases Research Team
Alan Rosenberg, Leader

Members: Adam Baxter-Jones, Roland Dyck, Punam Pahwa, Donna Rennie, Carl von Baeyer

The prevalence of certain chronic diseases in this country is increasing at an alarming rate. For example, from 1996-2002 diabetes rates in Saskatchewan increased by 19%; from 1985 – 1998 obesity rates doubled in Canada; and asthma affliction rates in children jumped from only 2% in 1978 to 12% in 1996. Are we unable to explain the causes behind these increases or is there a link between intrauterine inflammation and chronic disease?

Alan Rosenberg and his transdisciplinary research team are attempting to answer this question. Over the next two years, Rosenberg and colleagues from the biomedical, clinical, social and environmental health research fields will use an SHRF Team grant to determine whether or not prenatal factors such as stress, infections, nutritional deficiencies and environmental toxins induce the onset of certain chronic diseases in unborn babies. It is an area of health research that has not been studied in great detail, making it all the more necessary according to Rosenberg:

"Many diseases are considered to have multifactorial origins, an idea that, while frequently espoused and generally accepted, is seldom studied. This research program is designed as the first to effectively investigate, in the context of intrauterine inflammation, the multiple, inter-related early determinants of future disease."

Eventually the results of this research will provide new insight into fetal factors that influence the occurrence of future diseases. A better understanding of these factors may someday lead to measures that will prevent chronic diseases such as diabetes, obesity and asthma among newborns.

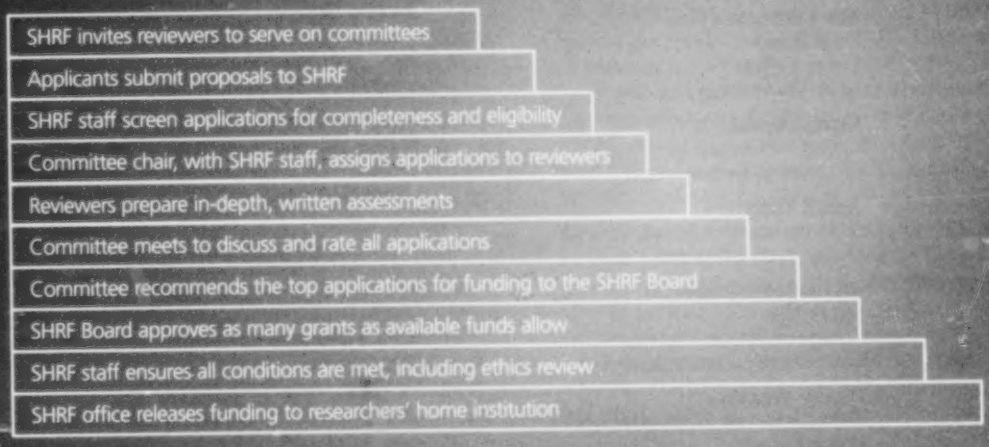
Peer Review

Our selection processes are founded on peer review, where panels of active researchers assess research proposals using excellence, relevance and feasibility as key deciding factors. Applications must also exemplify the stated objectives and priorities for the particular funding program (as described in our Awards Guide).

Our review committee chairs and members are primarily selected and recruited from Saskatchewan's health research and service communities. We also call on reviewers from outside the province for certain programs. Our peer reviewers are not only instrumental in evaluating applications; they also provide valuable feedback to us about procedures, programs and trends in the health research community. Peer review committee members for 2006-07 are listed in this section.

We are extremely grateful to our dedicated review committee chairs and members who so generously provide their expertise on a volunteer basis for up to three-year terms. These dedicated individuals contribute to the collective wisdom that is critical to the quality and integrity of our selection processes.

Selection Process Steps


SHRF invites reviewers to serve on committees
Applicants submit proposals to SHRF
SHRF staff screen applications for completeness and eligibility
Committee chair, with SHRF staff, assigns applications to reviewers
Reviewers prepare in-depth, written assessments
Committee meets to discuss and rate all applications
Committee recommends the top applications for funding to the SHRF Board
SHRF Board approves as many grants as available funds allow
SHRF staff ensures all conditions are met, including ethics review
SHRF office releases funding to researchers' home institution

Peer Review

Note: Figures in parentheses indicate number of years served, including current competition.

Biomedical Personnel Awards Review Committee

Louis Delbaere (Chair) (3)
Biochemistry
College of Medicine
University of Saskatchewan

Michael Corcoran (2)
Anatomy and Cell Biology
College of Medicine
University of Saskatchewan

Thomas Fisher (2)
Physiology
College of Medicine
University of Saskatchewan

Andrew Freywald (2)
Chemistry and Biochemistry
Faculty of Science
University of Regina

Gillian Muir (2)
Veterinary Biomedical Sciences
Western College of Veterinary Medicine
University of Saskatchewan

Scott Napper (2)
Vaccine and Infectious Disease Organization
University of Saskatchewan

Janette van den Berghe (3)
Pediatrics
College of Medicine
University of Saskatchewan

Biomedical Establishment Grant Review Committee

John Gordon (Chair) (3)
Veterinary Microbiology
Western College of Veterinary Medicine
University of Saskatchewan

Ron Geyer (2)
Biochemistry
College of Medicine
University of Saskatchewan

Rod Kelln (3)
Faculty of Graduate Studies and Research
University of Regina

Darrell Mousseau (2)
Psychiatry
College of Medicine
University of Saskatchewan

Helen Nichol (3)
Anatomy and Cell Biology
College of Medicine
University of Saskatchewan

Elemir Simko (3)
Veterinary Pathology
Western College of Veterinary Medicine
University of Saskatchewan

Sylvia van den Hurk (3)
Vaccine and Infectious Disease Organization
University of Saskatchewan

Socio-health Grants and Awards Review Committee

Bonnie Jeffery (Chair) (3)
Faculty of Social Work
University of Regina

Ken Craig (3)
Psychology
Faculty of Arts
University of British Columbia

Wendy Duggleby (1)
College of Nursing
University of Saskatchewan

Mary Hampton (2)
Psychology
Luther College
University of Regina

Kent Kowalski (2)
College of Kinesiology
University of Saskatchewan

Judith Kulig (1)
School of Health Sciences
University of Lethbridge

Michael MacGregor (1)
Psychology
College of Arts and Science
University of Saskatchewan

Dennis Wardman (1)
First Nations and Inuit Health Branch
Health Canada

Strategic Priorities Grant Review Committee

Gary Glavin (Chair) (2)
Pharmacology and Therapeutics, Surgery
Faculty of Medicine
University of Manitoba

Angela Busch (2)
Physical Therapy
College of Medicine
University of Saskatchewan

Thomas Chase (2)
Faculty of Arts
University of Regina

Bonnie Janzen (1)
Community Health and Epidemiology
College of Medicine
University of Saskatchewan

Research Group Development Grant Review Committee

Tom Wishart (Chair) (4)
College of Graduate Studies and Research
University of Saskatchewan

Leon Browder (4)
Biochemistry and Molecular Biology
Faculty of Medicine
University of Calgary

Andrew Demchuk (3)
Clinical Neurosciences
Faculty of Medicine
University of Calgary

Brenda Elias (1)
Community Health Sciences
Faculty of Medicine
University of Manitoba

Lorrie Kirshenbaum (1)
Physiology, Pharmacology and Therapeutics
Faculty of Medicine
University of Manitoba

Health Research Team Grant Review Committee

Neena Chappell (Chair) (1)
Sociology
Faculty of Social Sciences
University of Victoria

Patricia Martens (1)
Community Health Sciences
Faculty of Medicine
University of Manitoba

Paul McDonald (1)
Health Studies and Gerontology
Faculty of Applied Health Sciences
University of Waterloo

Carol Rodgers (1)
College of Kinesiology
University of Saskatchewan

Don Smyth (1)
Internal Medicine and Pharmacology
Faculty of Medicine
University of Manitoba

Partnerships

Saskatchewan – Canadian Institutes of Health Research (CIHR) Regional Partnership Program

The Sask – CIHR Regional Partnership Program (RPP) is a critical program for our province. This federal program helps increase federal health research funding in six eligible provinces and encourages strategic use of the funds to build health research capacity and sustainability.

Saskatchewan has participated in the RPP since 1999, when our provincial government signed a five-year agreement with CIHR to secure provincial matching funds. This meant that "the match" would be available to Saskatchewan researchers who achieved very good scores that were just below CIHR's very high funding cut-offs. Saskatchewan was the only province to take this approach and it was a key factor in the program's smooth operation in Saskatchewan.

From 1999/00 to 2005/06, CIHR funds to Saskatchewan researchers increased by almost four times – going from $2.7-million to $10.5-million and from 0.91% of CIHR's budget to 1.38%. During the same period, CIHR's budget also increased, but at a lower rate – about two and a half times. This means the province gained real ground during that period. In 2006-07, we experienced a slight dip, going to $10.2-million from CIHR, or 1.31%. Saskatchewan's goal is to reach 3% of CIHR's funding.

CIHR has extended the RPP twice since the 1999 agreement expired, first to 2005-06 and then to 2007/08. SHRF continued support for the program, committing $700,000/year to the $1-million annual matching pool. Our Board considers this commitment annually, subject to resource availability. Other provincial contributors include Saskatchewan Advanced Education and Employment, committing $250,000/year from the Innovation and Science Fund, and the University of Saskatchewan and University of Regina, contributing variable amounts to match student awards. SHRF manages and disburses most of the provincial matching funds on advice from a multi-stakeholder advisory committee. Funds not spent or committed at the end of the fiscal period are carried forward to match future RPP grants and awards.

Table 2 shows the number and value of new RPP grants and awards approved in Saskatchewan in 2006-07. Twelve were approved, totaling $1.6-million. Just over three-quarters of the funding went to operating grants, with the rest going to salary awards for faculty and doctoral students.

The program has demonstrated its effectiveness. A Saskatchewan evaluation several years ago showed an increase in the level of CIHR-funded research activity in the province, among both new researchers and more established researchers, as well as an increase in student training and in high-quality jobs. In 2005, CIHR undertook an evaluation of RPP across the country to guide its decision about the future of RPP. Results point to the program's effectiveness in increasing health research funding activity and productivity in the targeted provinces. Most RPP-funded researchers were also successful in securing subsequent full CIHR grants.

Recently, CIHR consulted with the six RPP-eligible provinces for input about the design of a renewed program. All the provinces provided evidence of the strong impact RPP has for their research community. RPP is clearly an effective mechanism for supporting health research more evenly across the country, helping CIHR fulfill that aspect of its mandate. The CIHR Governing Council will decide about extending the RPP early in 2007-08.

Table 2: *Summary of Grants and Awards Approved in 2006-07* Saskatchewan – Canadian Institutes of Health Research Regional Partnership Program*

Type	Term	Number Approved	Approved Funding ($) **
Faculty Salary Awards	Up to 5 years	1	275,000 (17%)
Postdoctoral Fellowships	Up to 3 years	0	—
Doctoral Fellowships	Up to 2 years	4	88,000 (5%)
Operating Grants	Up to 2 years	7	1,269,898 (78%)
Equipment Grants		0	—
TOTAL	—	**12**	**1,632,898 (100%)**

* *A list of approved grants and awards is available upon request.*

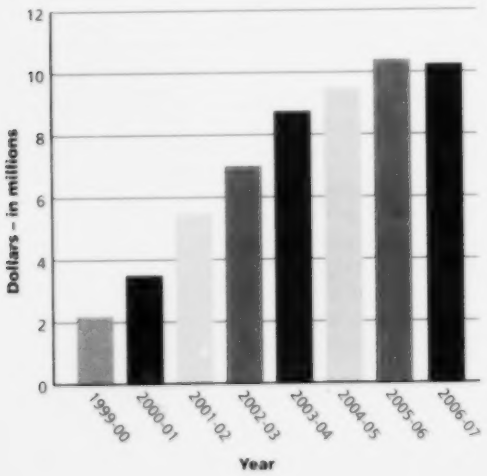
** *Approved amounts include both the CIHR and provincial commitments, matched 1:1. These amounts are as originally approved and do not reflect subsequent adjustments due to changes such as early terminations.*

Health Research Co-ordination

Another highly productive partnership started in 1999, when the Foundation and the University of Saskatchewan (U of S) collaborated to establish and support the office of the University Co-ordinator of Health Research, reporting to the Vice-President (Research). The original five-year agreement was extended, with the expiry date now June 2008. The Foundation provides $100,000/year and the U of S provides $50,000/year and in-kind support to this partnership. In its last year, this partnership will support a new shared position between the U of S (Associate Vice-President Research, Health) and the Saskatoon Health Region (Vice-President of Research and Innovation). The future of the partnership beyond that time will be considered in the coming year.

Dr. Bruce Waygood, in the position since July 2000, works with a broad range of health researchers to increase the number and quality of Saskatchewan applications to CIHR and to facilitate research collaboration. The role is multi-faceted, from encouraging more national grant applications, to developing an internal pre-review system, to liaising with CIHR and other provinces on key issues.

Figure 2: *CIHR Dollars to Saskatchewan*



The Foundation entered into a similar agreement with the University of Regina in 2005, contributing $35,000 for a (25% time) Health Research Leader function and a (50% time) supporting administrative position. The University's contributions include additional salary and in-kind support. Dr. David Gauthier, the new Associate Vice-President (Research), took on the new role, along with other duties, in April 2006.

These partnerships and the Sask-CIHR RPP create a very productive synergy for health research in Saskatchewan, leading to the substantial increase in CIHR funding experienced by Saskatchewan over the past seven years, illustrated in Figure 2.

Supporting Applied Health Research Training

SEARCH is a partnership program started by the Alberta Heritage Foundation for Medical Research (AHFMR) that trains health professionals in doing applied health research and using research evidence in making health services decisions. SEARCH stands for the Swift Efficient Application of Research in Community Health. The program is now operated by SEARCH Canada, based in Edmonton.

Saskatchewan first participated in SEARCH in 2003, under the auspices of the Health Quality Council. In 2005, SHRF took on the commitment as it was a good fit with the strategic theme "Applying What We Learn" in the *Health Research Strategy*. The program operates on a two-year intake cycle and SHRF provided travel and equipment support for two participants in 2005-06, who were selected in a competitive process. Karen Earnshaw from Indian Head Union Hospital and Penny Froh from Rural Health Services for Rosthern-Wakaw continued their studies through 2006/07, including research of direct interest to their regions, and will complete the program in June 2007. The Foundation also supported the participation of one Saskatchewan faculty member, Glenn Donnelly, College of Nursing, University of Saskatchewan, based in Regina. Information about the program and SEARCH Canada is available at www.searchca.net.

SEARCH Canada has been consulting and reflecting on new ways to partner with agencies in other provinces. The Foundation is interested in exploring such partnerships in ways that align with our new "Health Research in Action" framework and we look forward to considering the possibilities.

Health Research in Action

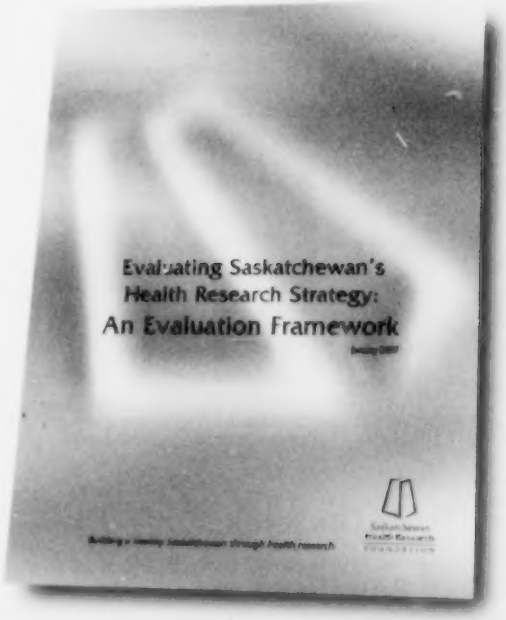
Our new "Health Research in Action" framework takes a very practical approach to building capacity for sharing and using health research to create health and social benefits (i.e., knowledge translation). The framework was built through partnerships and consultation, and its successful implementation will depend on continued collaborations. People from around the province, within many organizations and sectors and in a range of occupations, participated in our advisory committee, focus groups and final workshop.

The resulting framework can be applied in many agencies and sectors. It consists of three parts: guiding principles; strategic directions and actions; and implementation guidelines. The three strategic directions will help agencies build capacity: 1) explicitly acknowledging knowledge translation in job descriptions and work plans and rewarding these activities; 2) educating and supporting people to share and use health research; and 3) creating and enhancing structures, tools and policies that facilitate the process. The full framework is available on our Web site or from our office.

The framework is intended to serve as a template that agencies may adopt, in part or whole, to help them improve their capacity to share and use research to improve their effectiveness and their impact on health and health-care. The Foundation will be considering the various elements and how they may apply to our own work in facilitating this important area. We will also be tracking the framework's progress and impact as part of our ongoing evaluation work.

Measuring Impact

Evaluation has been a cornerstone of SHRF's work since our inception four years ago. Our evaluations, and those of our predecessor, the Health Services Utilization and Research Commission (HSURC), are generally based on the principles of accountability for our strategic and program activities, facilitating improvements in our processes, and contributing to the knowledge about the value and multiple impacts of health research. These principles are reflected in SHRF's recently released framework *(available in print and on our Web site)* for tracking the progress and impact of Saskatchewan's *Health Research Strategy*. The framework sets out a plan of action that we intend to follow over the coming months and years in measuring the shorter-term outputs and longer-term outcomes and impacts of the Strategy. 2006-07 marked a major milestone for SHRF, not only with the release of our evaluation framework, but also in the collection and analysis of baseline data in a number of key areas. In addition to our five-year follow-up impact study, now in its sixth year of implementation, SHRF collected data in the areas of public opinion, economic and social impact, and scientific output.



Our Programs

Evaluating our funding programs is important in assessing the extent to which program goals are achieved and understanding their contribution to Saskatchewan's health research enterprise. Since 1996, SHRF has followed-up with past Postdoctoral Fellowship and Establishment Grant holders to measure the impact of the program on their career, teaching and capacity building, subsequent research, and the economy. In 2001-02, HSURC funded eight New Investigator Establishment Grants. Five years later, we found that the funding they received was critical in launching their research careers in Saskatchewan. For example, seven of the eight have remained in the province and all eight have received additional funding to continue their research. A conservative estimate of the additional grant dollars relative to the original grant provided is approximately 4:1. Most have disseminated their research findings through scholarly publications and presentations locally, nationally, and internationally. The program has contributed to capacity-building among the eight recipients by: facilitating the training of graduate students and health practitioners (19 were trained); employing other researchers, technicians and support staff (13 were employed); and contributing to the creation of new research collaborations.

In addition to the five-year follow-up impact study, SHRF initiated a new process in 2006-07 to track funding allocations in the Strategy's priority areas. In our spring competition, approximately 80% of all funded New Investigator Establishment Grants and Postdoctoral Fellowships aligned with at least one of the Strategy's five priorities. Figure 3 provides a breakdown of SHRF's investment in these areas.

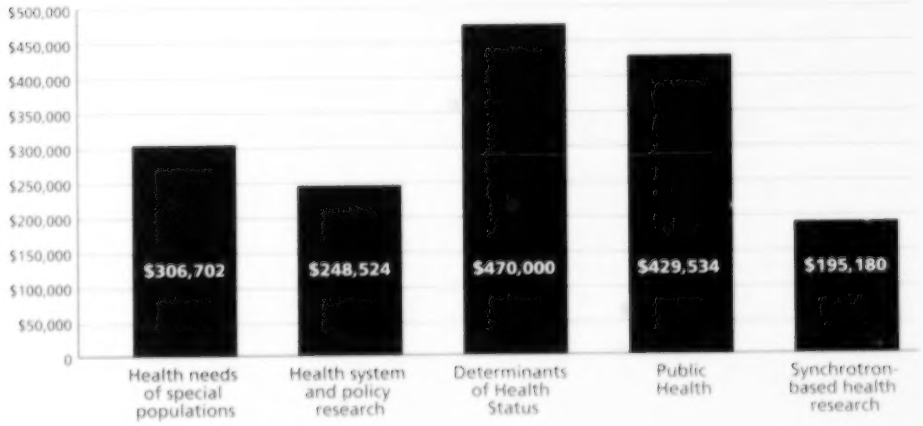
"One of the major benefits of having this (Establishment Grant) in place was building a foundation for future research in the area. It also allowed us to create a research group that has been very successful in attracting more dollars."

– 2001-02 Establishment Grant Recipient

"One of the things that encouraged and allowed me to stay here in Saskatchewan was the HSURC funding. Now that I've established myself, I see this as an ideal place to stay and grow and build a career."

– 2001/02 Establishment Grant Recipient

Figure 3: SHRF Funding Allocations for *Health Research Strategy* Priority Areas (Includes New Investigator Establishment Grants and Postdoctoral Fellowships)



"SHRF is important because it is right here at home. It allows us to fulfill the capacity that we have here in Saskatchewan, rather than sending our professionals to other provinces to conduct their research."

- Survey Respondent

"We need to continue health research in this province, as it provides the data to make informed, knowledgeable decisions in providing health services to the people of this province."

- Survey Respondent

Public Opinion

Monitoring public opinion was identified as an early activity in our evaluation framework. This includes measuring changes in perception of health research in Saskatchewan, SHRF, and the *Health Research Strategy*. In the spring of 2006, SHRF contracted Insightrix Research, Inc. to survey a random and representative sample of Saskatchewan residents. In total, 1,600 Saskatchewan residents were surveyed, providing a margin of error no greater than ± 2.45% 19 times out of 20. Here is just a snapshot of the survey results:

- The vast majority of respondents indicated that health research is important in: improving the health and well-being of Saskatchewan residents (95% felt it was important); increasing the ability to attract and retain highly qualified people in health care and health education (94% felt it was important); and providing better health services and products (94% felt it was important).
- 90% of those surveyed felt that it is important that public tax dollars be invested in health research in Saskatchewan.
- Roughly one-third (34%) of respondents were aware of some form of health research being conducted in Saskatchewan, with cancer research cited most often.
- 32% had heard or seen something about SHRF, while 61% indicated that the work of SHRF is very valuable to the province.

The complete report is available on our Web site. SHRF will continue to monitor trends in public opinion, reporting on these trends over the life of the Strategy.

Economic and Social Impact

To better understand the impact of the *Health Research Strategy* on health research capacity, health policy and practice, and the economy, SHRF started to work with the Saskatchewan Institute of Public Policy (SIPP) in 2006/07 on a study to measure the economic and social impacts of health research in Saskatchewan. Specifically, the study will look at: the direct and indirect economic effects of health research activity in Saskatchewan; the indirect effect on the province's social conditions through the application of results to health services and policy research; and the socio-economic benefits derived from the application of health technologies. Preliminary results from the study suggest that the economic impact of health research on the Saskatchewan economy is significant through:

- a direct contribution of $50.2 million in Gross Domestic Product (GDP) and a total (direct and indirect) contribution of $61.4 million;
- a direct contribution of $79.7 million to provincial output and a total contribution of $99.6 million; and
- a direct contribution of 1,238 jobs and a total contribution of 1,445 jobs.

A complete report on the results of this study will be published in 2007-08.

Scientific Output

Obtaining baseline data on the scientific positioning of Saskatchewan's health research was a final key activity in 2006/07. Working in collaboration with Science-Metrix, a Montreal-based firm that specializes in the measurement of science, technology, and innovation, SHRF began to investigate publication trends (quality and quantity) among health researchers, as a group, in scholarly journals. Drawing from the Science Citation Index (SCI) and the Social Sciences Citation Index (SSCI), the study allowed us to determine how Saskatchewan compares to Canada as a whole, to other provinces, and to similar international entities. It also allowed us to identify areas of health research where Saskatchewan excels and where additional support may be needed. Here are some of the results:

- From 1999 to 2004, Saskatchewan health researchers produced 2,472 health papers (or approximately 412 papers per year).
- Of these, Saskatchewan health researchers produced 797 papers in biomedical research, 1,398 papers in clinical medicine, 105 papers in the health social sciences, and 172 papers in psychology and psychiatry.
- During the period (1999-2004), 709 papers (or 29%) involved collaboration with a co-author from another province, while 732 of these papers (or 30%) involved collaboration with a co-author from another country.
- When compared to the world average, Saskatchewan tends to rate lower on the quantity of health research publications (expressed as a ratio of total research output in Saskatchewan) and on the quality of publications (measured by the impact factor of journals in which a publication appears).

SHRF is presently engaging our university and health partners in exploring these results and possible follow-up activities. SHRF will continue to track and report on these data in subsequent years.

"Health research drives change, provides a means with which to explore potential ways to improve the status quo and evaluate their successfulness. All health policy and practice should be based on evidence-based research."

- Study Participant

IMPACT STORY

What role does ubiquitin play in building our chromosomes?

Troy Harkness

Anatomy and Cell Biology, College of Medicine, University of Saskatchewan

It is widely known that ubiquitin, a small protein found in eukaryotic cells (where our genetic material is found), enacts change by regulating chromatin assembly. Chromatin assembly is considered the first step in building complete chromosomes, which encode our genes and give each of us unique individual characteristics. What is not widely understood is how ubiquitin does this.

In 2001 Dr. Troy Harkness received funding from SHRF's predecessor, the Health Services Utilization and Research Commission (HSURC), to conduct focused biomedical research on whether or not abnormalities in ubiquitin pathways can affect the development of our chromosomes.

Using brewer's yeast as a model genetic system, Harkness proposed to find out what specific components of the ubiquitin system regulate chromatin assembly, whether or not histones are the target of an ubiquitin-dependent system, and what other proteins may be targeted by such a system. Harkness felt the research was important since mutations to ubiquitin-pathway components negatively affect chromosome building capacity. Such mutations found in humans can lead to cancer or other misfortunes. If these mutant strains were clearly identified, chromosomal abnormalities could be avoided.

Five years later, Harkness says the aims of his study were successfully achieved. "First we showed that defects in ubiquitin targeting caused histone levels to decrease. Second, we identified two other factors required for chromatin assembly. Our work yielded valuable information on how cells regulate and maintain normal chromosome structure."

Now that Harkness' research program is established and ongoing, what impact has it had on health research, on our health and well-being, and has it built health research capacity?

On health research...

"Without the initial HSURC grant I doubt that I would have been able to continue this avenue of study, so that the NSERC [Natural Sciences and Engineering Research Council] grant that I have been awarded probably wouldn't have happened. I've also been able to foster several interactions with students who will be continuing in different capacities because of the project, so I think I've been able to make some ties that will last."

On our health and well-being...

"I think there will be an impact on the health and well-being of people. For example, I think we're looking at a method of studying diabetes using yeast. The main protein that we're studying potentially plays a role in sensing insulin and nobody is really looking at this in the same way, particularly using yeast."

On building health research capacity...

"I think the payoff is coming. The investment that SHRF has put into its programs, including the RPP [Regional Partnership Program] has been extremely important in getting people here, keeping people here, and allowing them to establish themselves on a national and international level."

"Our work will yield valuable information on how cells regulate and maintain normal chromosome structure."

– Troy Harkness

IMPACT STORY

Coping with social physique anxiety in adolescence

Kent Kowalski

College of Kinesiology, University of Saskatchewan

How do our youth cope with anxiety related to their physical appearance? It is a question that many parents and socio-health researchers ask themselves time and again. More specifically, why do teenagers cope with their physical appearances in different ways?

An emerging body of literature is developing around social physique anxiety, or the social anxiety experienced in relation to the evaluation of the body. Recent studies have shown that female social physique anxiety can be attributed to a number of health-related variables such as self-esteem, physical self-perceptions, dietary restraints, and body dissatisfaction. Despite these relationships, it is not yet known how adolescents cope with social physique anxiety.

In 2001 Kent Kowalski received funding from HSURC to find out why adolescents favour one coping mechanism over another when it comes to their physical appearance. Kowalski and a team of health researchers conducted the study in three stages. Stage one involved sending self-report questionnaires to approximately 400 young women and 200 young men from three different age groups to determine if age had any impact on body anxiety. The second stage involved interviews with approximately 30-40 teenagers to learn how they coped with physical anxiety and to understand the rationale behind their choices in dealing with this difficult issue. The third and final stage examined the links between the study participants' experiences of social physique anxiety and health-related behaviours (i.e., smoking, dieting, and physical activity).

Kowalski believes that while the long-term impacts of his research are yet to come, the significance of the research should not be overlooked.

"Although the impact to the scientific community is yet to be known, its potential significance is great. It will provide insight into the wide range of cognitive and behavioural coping strategies adolescents use to manage social physical anxiety. It will also lead to the development of a code book that can act as a taxonomical starting point for coping in the body domain."

What stood out for Kowalski was the impact the research project had on his graduate students.

"I don't believe that the growth of my own research program would have been this successful without the support from HSURC. The funding allowed me to support three undergraduate students who went on to do graduate work in their respective fields of study."

Kowalski's project not only led to building a strong graduate student base in this particular area, it also led to the publishing of several articles in peer-reviewed journals and the delivery of numerous presentations throughout the study period.

With all this in mind, what has been the impact of this research?

On teaching...

"The biggest impact in terms of my teaching is when I first started the research methods were weighted towards quantitative methodologies, but through the journey of the research I really did a lot of work to look at different ways of answering questions and looking at different questions to ask."

On our health and well-being...

"Speaking directly to the involvement of one of my graduate students in this research project, I would say her work with young aboriginal women, with issues around the body, is important since the voices of many of these women are absent from the literature. I can guarantee she'll make a difference in some way in terms of the well-being of some of these young women."

On building health research capacity...

"The research project really changed my thinking about things as a faculty member, certainly in terms of building the graduate student base. I think the grant certainly set up funding from other agencies for my students, they are doing phenomenal at the tricouncil level."

"I don't believe that the growth of my own research program would have been this successful without the support from HSURC."

– Kent Kowalski

Showcasing Health Research

Promoting the many benefits of health research is important for building and maintaining a strong health research base in this province. With this in mind the Foundation continued, and expanded upon, its promotional activities in 2006/07. We continued promoting our funded researchers, the results of their research, and other activities that the Foundation initiated throughout the year.

The first major showcasing initiative in 2006 was the *Research for Health* campaign. The advertising campaign consisted of quarterly print ads in *Health Matters* magazine (a publication produced by the Saskatchewan Association of Health Organizations), the Saskatoon *Star Phoenix*, Regina *Leader Post* and select weekly newspapers across the province. The advertisements highlighted specific health researchers and reached an audience of more than 500,000 people.

The year 2007 also marked the 2nd anniversary of SHRF's new and improved Web site. The site (www.shrf.ca) offers users a number of opportunities to learn more about the research SHRF supports. In addition to research summaries and funding details, users also have an opportunity to see our researchers first hand by viewing many of the rotating photographic advertisments that appear on various pages. In 2006/07, SHRF's Web site garnered more than one million hits from across the world indicating that people from all corners of the globe are interested in the health research that is occurring in this province.

The Foundation once again honoured individual researchers who made career achievements to health research in Saskatchewan, through the 2006 SHRF Achievement Awards. These awards were unveiled in 2005 as part of the celebrations surrounding Saskatchewan's centennial. The awards recognize individuals who made major contributions to biomedical, clinical or socio-health research as well as teaching and community service. The winners of the 2006 SHRF Achievement Awards were Dr. Thomas Hadjistavropoulos – a socio-health researcher from the University of Regina, and Dr. Donald Cockroft – a clinical researcher from the University of Saskatchewan. There was no winner in the biomedical category. Congratulations to our 2006 winners! We look forward to offering the awards once again in 2007.

Saskatchewan Health Research Foundation Achievement Awards 2006

Clinical 2006 Achievement Award winner Dr. Donald Cockroft (2nd from right) along with (L to R) Hon. Pat Atkinson, June Bold and Greg Marchildon.

Socio-health 2006 Achievement Award winner Dr. Thomas Hadjistavropoulos (2nd from right) along with (L to R) Hon. Pat Atkinson, Greg Marchildon and June Bold.

The Foundation's Top Researcher Awards are given to those individuals who ranked highest in the New Investigator Establishment Grant and Postdoctoral Research Fellowship competitions. The top researchers in 2006 for the New Investigator Establishment category were Lynn Weber (biomedical) and Roanne Thomas-MacLean (socio-health). The top researchers for 2006 in the Postdoctoral Research Fellowship program were Hassanali Vatanparast (socio-health) and Brij Verma (biomedical). Congratulations to our top researchers! To find out more about their projects please refer to the Research Spotlights in the Funding Programs section of this report.

Brij Verma *(left)*

Hassanali Vatanparast *(right)*

Lynn Weber *(2nd from left)*

Once again the year's premier showcase activity was the annual SHRF Awards Dinner – "Sante! A toast to Saskatchewan health research successes". More than 140 researchers and members of Saskatchewan's health research community attended the December 7th event at Saskatoon's Delta Bessborough Hotel. The evening gave us a chance to meet the researchers and celebrate the many successes of health research in Saskatchewan. Key to the success of the dinner were the researchers' poster presentations. The presentations gave the researchers an opportunity to tell others about their projects and expected benefits. Feedback from guests and presentors was very positive and we look forward to seeing more posters next year. The Honourable Pat Atkinson, Minister of Advanced Education and Employment, attended the 2006 awards dinner and graciously assisted in presenting the Top Researcher and Achievement Awards.

The dinner coincided once again with Health Research Week. At the request of the Foundation, the Minister of Health declared December 3 – 9 as Health Research Week in Saskatchewan. The week's other activities included a partnership with the universities, Health Quality Council, Northern Intertribal Health Authority and Canadian Light Source Synchrotron on a series of lectures around the province to promote the research that we support. We look forward to another successful awards dinner and health research week in 2007.

Report of Management

Management is responsible for the integrity of the financial information reported by the Saskatchewan Health Research Foundation. Fulfilling this responsibility requires the preparation and presentation of financial statements and other financial information in accordance with Canadian generally accepted accounting principles that are consistently applied, with any exceptions specifically described in the financial statements.

The accounting system used by the Foundation includes an appropriate system of internal controls to provide reasonable assurance that:

- transactions are authorized;
- the assets of the Foundation are protected from loss and unauthorized use; and
- the accounts are properly kept and financial reports are properly monitored to ensure reliable information is provided for preparation of financial statements and other financial information.

To ensure management meets its responsibilities for financial reporting and internal control, board members of the Foundation discuss audit and financial reporting matters with representatives of management at regular meetings. Foundation board members have also reviewed and approved the financial statements with representatives of management.

The Provincial Auditor of Saskatchewan has audited the Foundation's statement of financial position and statements of operations, change in net financial assets and cash flows. His responsibility is to express an opinion on the fairness of management's financial statements. The Auditor's report outlines the scope of his audit and his opinion.

Gregory P. Marchildon, PhD
Board Chair

June M. Bold, MSc
Chief Executive Officer

Saskatoon, Saskatchewan
April 28, 2007

Financials

AUDITOR'S REPORT

To the Members of the Legislative Assembly of Saskatchewan

I have audited the statement of financial position of the Saskatchewan Health Research Foundation as at March 31, 2007 and the statements of operations and change in net financial assets and cash flows for the year then ended. The Foundation's management is responsible for preparing these financial statements for Treasury Board's approval. My responsibility is to express an opinion on these financial statements based on my audit.

I conducted my audit in accordance with Canadian generally accepted auditing standards. Those standards require that I plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In my opinion, these financial statements present fairly, in all material respects, the financial position of the Saskatchewan Health Research Foundation as at March 31, 2007 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

Fred Wendel, CMA, CA
Provincial Auditor

Regina, Saskatchewan
May 8, 2007

Statement 1

SASKATCHEWAN HEALTH RESEARCH FOUNDATION
STATEMENT OF FINANCIAL POSITION
As at March 31

	2007	2006
		(Note 11)
Financial assets		
Cash and cash equivalents (Schedule1)	$ 842,012	$ 453,947
Accrued interest receivable	5,677	-
Accounts receivable	8,305	6,732
Short-term investments (Schedule 1)	1,088,907	1,661,002
Long-term investments (Schedule 1)	2,769,820	3,727,899
	4,714,721	5,849,580
Liablities		
Accounts payable and accrued liabilities	17,939	3,971
Grants payable	462,100	357,926
	480,039	361,897
Net financial assets	4,234,682	5,487,683
Non-financial assets		
Tangible capital assets (Note 2(b) and 3)	43,705	60,221
Prepaid expenses	9,502	4,956
	53,207	65,177
Accumulated surplus	$ 4,287,889	$ 5,552,860

Commitments (Schedule 2 and Notes 4, 5 and 6)

(See accompanying notes to the financial statements)

Statement 2

SASKATCHEWAN HEALTH RESEARCH FOUNDATION
STATEMENT OF OPERATIONS
For the Year Ended March 31

	2007		2006
	Budget	Actual	Actual
	(Note 9)		(Note 11)
Revenue			
General Revenue Fund			
Saskatchewan Health	$ 5,933,000	$ 5,933,000	$ 5,933,000
Saskatchewan Learning	-	-	250,000
Saskatchewan Advanced Education & Employment	250,000	250,000	-
Partnership Revenue	-	39,076	19,912
Interest	200,000	200,594	236,141
Recoveries	-	23,614	22,343
Donations	-	41	-
Miscellaneous	-	1,625	1,516
Total revenue	6,383,000	6,447,950	6,462,912
Expense			
Personnel awards	911,250	681,022	761,332
Research grants (Notes 2(c) and 5)	1,605,180	1,587,544	1,410,406
Centre grants (Note 5)	3,100,000	3,306,716	3,089,091
Partnership grants (Note 5)	135,000	135,000	108,750
RPP grants (Note 6)	950,000	979,713	935,404
Wages and benefits	530,600	536,104	455,150
Adminstrative and operating expenses	531,415	415,857	351,807
Honoraria and expenses of the board and committees	89,840	70,965	43,215
Total expenses	7,853,285	7,712,921	7,155,155
Annual deficit	$ (1,470,285)	(1,264,971)	(692,243)
Accumulated surplus, beginning of year		5,552,860	6,245,103
Accumulated surplus, end of year		$ 4,287,889	$ 5,552,860

(See accompanying notes to the financial statements)

Statement 3

SASKATCHEWAN HEALTH RESEARCH FOUNDATION
STATEMENT OF CHANGE IN NET FINANCIAL ASSETS
For the Year Ended March 31

	2007	2006
		(Note 11)
Annual deficit	$ (1,264,971)	$ (692,243)
Acquisition of tangible capital assets	(6,410)	(26,873)
Loss on disposal of capital assets	246	-
Amortization of tangible capital assets	22,680	26,602
	16,516	(271)
Acquisiton of prepaid expense	(9,625)	(8,883)
Use of prepaid expense	5,079	5,843
	(4,546)	(3,040)
Decrease in net financial assets	(1,253,001)	(695,554)
Net financial assets, beginning of year	5,487,683	6,183,237
Net financial assets, end of year	$ 4,234,682	$ 5,487,683

(See accompanying notes to the financial statements)

Statement 4

SASKATCHEWAN HEALTH RESEARCH FOUNDATION
STATEMENT OF CASH FLOWS
For the Year Ended March 31

	2007	2006
		(Note 11)
Operating transactions		
Annual deficit	$ (1,264,971)	$ (692,243)
Non-cash items included in annual deficit:		
Amortization of tangible capital assets	22,680	26,602
Loss on disposal of capital assets	246	-
Bond discount amortization	(175,856)	(226,451)
Net change in non-cash working capital items:		
Accrued interest receivable	(5,677)	8,338
Accounts receivable	(1,573)	381
Prepaid expenses	(4,546)	(3,040)
Accounts payable	13,968	(41,565)
Grants payable	104,174	31,475
Cash used by operating transactions	(1,311,555)	(896,503)
Capital transactions		
Cash used to acquire tangible capital assets	(6,410)	(26,873)
Investing transactions		
Purchase of investments	(200,000)	(1,923,800)
Proceeds from disposal and redemption of investments	1,906,030	3,283,521
Cash provided by investing transactions	1,706,030	1,359,721
Increase in cash and cash equivalents	388,065	436,345
Cash and cash equivalents, beginning of year	453,947	17,602
Cash and cash equivalents, end of year	$ 842,012	$ 453,947

(See accompanying notes to the financial statements)

SASKATCHEWAN HEALTH RESEARCH FOUNDATION
NOTES TO THE FINANCIAL STATEMENTS
MARCH 31, 2007

1. Establishment of the Foundation

On January 31, 2003, *The Saskatchewan Health Research Foundation Act* (S.S. 2002, c.S-21.1) came into force establishing the Saskatchewan Health Research Foundation (Foundation). The Foundation is responsible for organizing, managing and allocating most provincial health research funding in Saskatchewan and for ensuring that supported research fits with the Province's health research priorities and leads to benefits for health and the health system in Saskatchewan. The Foundation is the lead agency on implementing the provincial *Health Research Strategy*.

2. Accounting Policies

The Foundation uses generally accepted accounting principles as recommended by the Public Sector Accounting Board of the Canadian Institute of Chartered Accountants. The following accounting principles are considered to be significant:

a) Revenue

The Foundation's main revenue for operations is received from Saskatchewan Health – General Revenue Fund with other revenue coming from partnerships, interest and miscellaneous revenue. Contributions are unrestricted and are recognized in the year received.

Restricted contributions received from Saskatchewan Advanced Education and Employment are used to provide matching funds for the Canadian Institutes of Health Research Regional Partnership Program (RPP) (see note 6). These contributions are deferred and recognized in the year expenses are incurred.

b) Tangible capital assets

The recognition and measurement of tangible capital assets is based on their service potential. Purchases of furniture and office equipment over $250 and computer hardware and software over $500 are recorded at cost as a capital asset. Purchases below these amounts are expensed as incurred. Amortization is recorded on a straight-line basis as follows:

Furniture	10 years
Office Equipment	5 years
Computer Hardware and Software	3 years
Leasehold Improvements	length of lease

Normal maintenance and repairs are expensed as incurred.

c) Research grants

The Foundation holds annual funding competitions through which applications are adjudicated by experts based on excellence and relevance. Grants are awarded to successful applicants, subject to resource availability. Terms vary and are normally multi-year. The Foundation expenses the approved funds for each year of the grant, provided recipients meet eligibility criteria.

The Foundation policy for administering grant funds changed in 2006-07. Previously, total grant funds approved were paid out over the term of the grant, with any amounts not paid or payable at year-end recorded as commitments and held as internally restricted funds. Now, grant funds approved are paid from current year revenue for each year of the grant, with future year's commitments subject to available revenue. Grant recipients are informed of this condition in a written grant offer.

The balance of funds advanced to administering institutions in excess of the current requirements of researchers is held in trust by those institutions until drawn down by the researchers. Funds not spent during the term of a research grant are treated as a recovery in the year that this is determined.

d) Investments

Investments are valued at the lower of amortized cost or net realizable value.

e) Basis of accounting

The financial statements are prepared using the accrual basis of accounting.

3. Tangible Capital Assets

	Furniture and Equipment	Leasehold Improvements	2007 Totals	2006 Totals
Opening cost	$ 87,818	$ 37,726	$ 125,544	$ 98,671
Additions during the year	6,410	-	6,410	26,873
Disposals during the year	7,827	-	7,827	-
Closing cost	86,401	37,726	124,127	125,544
Opening accumulated amortization	46,460	18,863	65,323	38,721
Amortization for the year	13,248	9,432	22,680	26,602
Disposals during the year	7,581	-	7,581	-
Closing accumulated amortization	52,127	28,295	80,422	65,323
Net book value of tangible capital assets	$ 34,274	$ 9,431	$ 43,705	$ 60,221

4. Lease Commitments

At March 31, 2007, the Foundation had the following lease commitments:

	2008	2009	2010	2011	2012
Office rent lease	$ 30,481	$ ---	$ ---	$ ---	$ ---
Photocopier lease	3,817	3,817	3,817	3,817	3,181
	$ 34,298	$ 3,817	$ 3,817	$ 3,817	$ 3,181

5. Research Funding Future Commitments (Schedule 2)

The Foundation has committed future funding not only for annual funding competitions, but also for other research initiatives. The Foundation provides core funding to several research centres, carrying on commitments transferred from Saskatchewan Health and the Health Services Utilization and Research Commission. Additionally, the Foundation periodically enters into funding partnerships, often spanning more than one year, to help achieve its goals and objectives.

6. Saskatchewan – Canadian Institutes of Health Research (CIHR) Regional Partnership Program (RPP) Fund

The Foundation provides funds to match funding from the Canadian Institutes of Health Research (CIHR) Regional Partnership Program (RPP) on a 1:1 basis to support Saskatchewan researchers and research projects. The Foundation also receives $250,000 from Saskatchewan Advanced Education and Employment (from the Innovation and Science Fund) for this program. Unused funding is held by the Foundation for distribution in future years.

	2007
Balance, beginning of year	$ 1,348,280
Saskatchewan Health Research Foundation	700,000
Saskatchewan Advanced Education and Employment	250,000
Grants paid out during 2006-07	(979,713)
Balance, end of year	$ 1,318,567
Future grant commitments:	
2007-08	(635,120)
2008-09	(203,322)
2009-10	(80,000)
2010-11	(48,125)
2011-12	(18,750)
Available for future grant commitments	$ 333,250

7. Related Party Transactions

Included in these financial statements are transactions with various Saskatchewan Crown Corporations, departments, agencies, boards and commissions related to the Foundation by virtue of common control by the Government of Saskatchewan, and non-Crown corporations and enterprises subject to joint control or significant influence by the Government of Saskatchewan (collectively referred to as "related parties").

Routine operating transactions with related parties are recorded at the standard rates charged by those organizations and are settled on normal trade terms. These transactions and amounts outstanding at year-end are as follows:

	2007	2006
Research grant, administrative and occupancy expenses:		
Capital Pension Plan - employee benefits	$ 23,021	$ 20,032
Saskatchewan Association of Health Organizations	12,287	12,882
Saskatchewan Cancer Agency	563,000	563,000
Saskatchewan Opportunities Corporation	83,771	80,440
SaskTel	12,381	11,087
University of Regina	1,174,009	886,529
University of Saskatchewan	4,947,643	4,661,542
Other	9,206	12,098
Accounts payable	13,369	1,370
Grants payable	462,100	357,926
Accounts receivable	1,208	--

The Foundation pays Provincial Sales Tax to the Saskatchewan Department of Finance on all its taxable purchases. Taxes paid are recorded as part of the cost of those purchases.

Other transactions with related parties and amounts due to or from them are described separately in these financial statements and the notes thereto.

8. Financial Instruments

The Foundation has the following financial instruments: accrued interest receivable, accounts receivable, investments, accounts payable, and grants payable. The following paragraphs disclose the significant aspects of these financial instruments.

a) Significant terms and conditions

There are no significant terms and conditions associated with the financial instruments, other than investments, that may affect the amount, timing, and certainty of future cash flows. Significant terms and conditions for investments are described separately in these financial statements and the accompanying notes.

b) Interest rate risk

The Foundation is exposed to interest rate risk when the value of its financial instruments fluctuates due to changes in market interest rates.

The Foundation's receivables and payables are non-interest bearing. Due to the short-term nature of these, as well as cash and short-term investments, interest rate risk is minimal.

As market interest rates fluctuate the market value of long-term investments moves in the opposite direction. This risk will affect the price the Foundation could sell the investments for prior to maturity.

c) Credit risk

The Foundation is exposed to credit risk from potential non-payment of accounts receivable or investment income and principal.

Most of the Foundation's receivables are from the provincial government; therefore the credit risk is minimal.

The Foundation's investments consist of provincial and federal government bonds, promissory notes, treasury bills and bankers acceptances with large Canadian banks. Therefore, credit risk for investments and related accrued interest receivable is minimal.

d) Fair value

For the following financial instruments, the carrying amounts approximate fair value due to their immediate or short-term nature:

Accrued interest receivable
Accounts receivable
Short-term investments
Accounts payable
Grants payable

The fair value of long-term investments is $2,740,027 (2006 - $3,686,646). The fair value is considered to approximate quoted market values.

9. Budget

The operating budget was approved by the Foundation's Board on March 10, 2006.

10. Pension Plan

The Foundation is a participating employer in the Capital Pension Plan, a defined contribution pension plan. Eligible employees make monthly contributions of 5.5% of gross salary, which are matched by the Foundation. During the year, the Foundation's total contributions were $23,021 (2006 - $20,032).

11. Comparative Information

In 2007, the Foundation changed accounting policy from Canadian generally accepted accounting principles for non-profit organizations to accounting principles recommended by the Public Sector Accounting Board of the Canadian Institute of Chartered Accountants. Prior year presentation has been restated to conform to the current year change in accounting policy.

Schedule 1

SASKATCHEWAN HEALTH RESEARCH FOUNDATION
SCHEDULE OF INVESTMENTS
As at March 31, 2007

	MATURITY DATE	CARRYING VALUE	EFFECTIVE RATE
Cash and cash equivalents:			
Canadian Imperial Bank of Commerce		$ 158,154	
CIBC Wood Gundy cash account		260,741	
Manulife Bank investment savings account		423,117	3.25%
		842,012	
Short-term investments:			
Province of Newfoundland	17-Apr-2007	296,252	4.35%
Province of New Brunswick	15-Jun-2007	198,365	2.90%
Province of Ontario	12-Sep-2007	296,542	4.35%
Government of Canada Strip Bond	1-Dec-2007	297,748	4.43%
		1,088,907	
Long-term investments:			
Province of British Columbia	9-Jun-2008	309,834	4.59%
Province of Saskatchewan	10-Apr-2009	212,425	3.25%
Province of Newfoundland	17-Apr-2009	471,488	4.12%
Province of Ontario	19-Nov-2009	519,998	4.06%
Province of Saskatchewan	18-Jan-2010	214,754	4.38%
Ontario Hydro	11-Apr-2010	215,677	4.47%
Province of British Columbia	23-Aug-2010	210,909	3.57%
Province of Ontario	2-Jun-2011	214,735	3.69%
Sask Savings Bond	15-Jul-2011	200,000	4.00%
Province of Manitoba Allocation Notes	27-Sep-2013	200,000	
		2,769,820	
		$ 4,700,739	

(See accompanying notes to the financial statements)

Schedule 2

SASKATCHEWAN HEALTH RESEARCH FOUNDATION
SCHEDULE OF RESEARCH FUNDING COMMITMENTS
As at March 31, 2007

The Research Funding commitments at March 31, 2007 were as follows:
(Note 5)

YEAR	RESEARCH GRANTS	CENTRES	PARTNERSHIPS	TOTAL
2008	$ 1,616,499	$ 1,275,000	$ 135,000	$ 3,026,499
2009	914,584	500,000	60,000	1,474,584
2010	470,000	-	35,000	505,000
2011	300,000	-	26,250	326,250
2012	-	-	-	-
	$ 3,301,083	$ 1,775,000	$ 256,250	$ 5,332,333

(See accompanying notes to the financial statements)

Saskatchewan
Health Research
FOUNDATION

253-111 Research Drive Atrium Building, Innovation Place, Saskatoon SK S7N 3R2 Canada
Phone: 306-975-1680 Fax: 306-975-1688 Web site: www.shrf.ca

PAYEE LIST

FISCAL YEAR APRIL 1, 2006 – MARCH 31, 2007

Personal Services

Listed are individuals who received payments for salaries, wages, honoraria, etc. which total $2,500 or more.

Bold, June	$126,810
Briggs, Alexa	50,495
Disano, Jason	60,024
Ebbesen, Lori	46,663
Nastiuk, Lynn	32,214
Wailing, Sherry	44,808
Winkel, James	53,500
Ziegler, Valerie	41,058
Payees under $2,500	13,237
	$468,809

Travel

All	$ 76,375

Transfers

Listed by program, are transfers that are committed to institutions to administer SHRF grants.

Fellowships (Postdoctoral and Clinical Research)

• University of Saskatchewan	$ 681,022

Biomedical Establishment and Equipment Grants

• University of Regina	$ 40,000
• University of Saskatchewan	589,655
	$ 629,655

Socio-Health Establishment and Equipment Grants

• University of Regina	$ 79,836
• University of Saskatchewan	433,328
	$ 513,164

Partnership Grants

• University of Saskatchewan, CLS	$ 100,000
• University of Saskatchewan	44,929
	$ 144,929

Research Group Development Grants

• University of Saskatchewan	$ 97,917

Research Group Facilitation Grants

• University of Saskatchewan	$ 95,000

Research Connections Grants

• Canadian Federation of Biological Societies	$ 5,000
• International Centre for Infectious Disease	5,000
• Prince Albert Grand Council	5,000
• University of Regina	3,000
• University of Saskatchewan	38,000
	$ 56,000

Strategic Priorities Grants

• University of Regina	$ 12,389
• University of Saskatchewan	30,742
	$ 43,131

Centre Grants

• SCA	$ 563,000
• University of Regina, IPHRC	500,000
• University of Regina, SPHERU	404,873
• University of Saskatchewan, IAREH	250,000
• University of Saskatchewan, NRU	1,262,000
• University of Saskatchewan, SPHERU	326,843
	$3,306,716

Regional Partnership Program Grants

• University of Regina	$ 92,937
• University of Saskatchewan	886,776
	$ 979,713

Partnerships Health Research Co-ordination	
• University of Regina	$ 35,000
• University of Saskatchewan	100,000
	$ 135,000

Supplier Payments

Listed are payees who received $20,000 or more for the provision of goods and services, including office supplies, communications, contracts, and equipment.

Capital Pension Plan	$ 23,021
Gryphon Communications Inc	27,894
SOCO	83,771
Synaptix	33,993
The StarPhoenix	31,805
Payees under $20,000	285,006
	$ 485,490

Saskatchewan
Health Research
FOUNDATION

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